

1 May 1991

GESAA-A

SIMULATOR, SYNCHRO/RESOLVER

1. GENERAL. This procurement requires a synchro/resolver simulator in a rackmount configuration for use with 60 Hz, 400 Hz, and 10 kHz signals.

2. CLASSIFICATION. Type II, Class 5, Style F, and Color R in accordance with MIL-T-28800 for shipboard applications except power source requirements are not invoked.

3. OPERATIONAL REQUIREMENTS. The equipment shall be capable of simulating synchro and resolver operation. A display in terms of degree angle displacement shall be provided in accordance with table I and the following specifications.

TABLE I. Specifications

	60 Hz	<u>Operation</u> 400 Hz	10 kHz
Angular Accuracy (arc sec)	10	10	20
F Rating (See note) 26V Input	-----	0.5F or 40 Vrms	0.012F or 40 Vrms
115V Input	2.0F or 170 Vrms	2.0F or 170 Vrms	0.05F or 170 Vrms
Mode	Synchro	Synchro or Resolver	Resolver
Nominal Output (Vrms)	90	11.8, 26, 90, 115	11.8, 26, 90, 115
NOTE: F rating x frequency of operation equals maximum voltage input.			

3.1 Frequencies of operation. 60 Hz, 400 Hz, and 10 kHz nominal.

3.2 Angular display range. 0° to 359.999°.

3.2.1 Angular resolution. 0.001°.

3.3 Isolation. The equipment inputs and outputs shall be shielded and completely isolated from each other and from the case.

4. GENERAL REQUIREMENTS.

4.1 Weight. 28 kg (62 lb) maximum.

4.2 Lithium batteries. Per MIL-T-28800, lithium batteries are prohibited without prior authorization. A request for approval for the use of lithium batteries, including those encapsulated in integrated circuits, shall be submitted to the procuring activity at the time of submission of proposals. Approval shall apply only to the specific model proposed.